

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A network system wherein an IP packet according to a service requested by a terminal is sent to ~~a one of a plurality of service provider providers~~ through a plurality of IP networks different from each other in protocol and the service is supplied to the terminal through the utilization of an IP packet transmitted from the service provider to the plurality of IP networks,

said network system comprising packet exchange means, ~~that is provided between the plurality of IP networks, and functions to convert for converting~~ the format of the IP packet, to be sent between the IP networks, so as to match the format of ~~the an~~ IP network as a send destination,

wherein connection between the user terminal and the plurality of service providers is unified.

2. (currently amended): The network system according to claim 1, wherein the plurality of IP networks include;

a first IP network, which the terminal accesses, and

a second IP network, which the service provider accesses.

3. (currently amended): The network system according to claim 2, wherein the first IP network has a first server which stores service information of services provided by the service provider.

4. (original): The network system according to claim 2, wherein the first IP network has a second server which stores account information of the service which has been provided to the terminal.

5. (currently amended): The network system according to claim 3, wherein the first server stores the format of each of the ~~plurality of~~ IP networks and the address of the service provider.

6. (currently amended): The network system according to claim 1, wherein the packet exchange means measures the ~~transfer~~ amount of data of the IP packet ~~of~~ for which the format has been converted.

7. (currently amended): The network system according to claim 2, wherein the terminal is connected to the first IP network through an access gateway ~~which~~that authenticates the IP packet.

8. (currently amended): A network system comprising:

a user terminal to be utilized by a user;

a plurality of networks of service providers or online entrepreneurs which provide various services to the user, wherein connection between the user terminal and the plurality of service providers is unified;

an IP network which ~~performs the transmission of~~transmits packet data between the user terminal and the ~~plurality of~~ networks through a router according to an IP address; and

one or more servers connected to the IP network,

said servers functioning to record information about the user, information about the plurality of service providers or online entrepreneurs, and information about services provided ~~from the side of~~by the ~~plurality of~~ networks to the user, and, based on the ~~record~~recorded information, to unitarily manage account information of the ~~service~~services provided to the user, and to perform alternative account billing from the service providers or online entrepreneurs to the user.

9. (currently amended): The network system according to claim 8, which further comprises a packet exchange connected to the IP network, said packet exchange ~~functioning to convert~~for converting packet data from the user terminal to the protocol and format of a ~~send~~ destination network within the ~~plurality of~~ networks, and to convert packet data from ~~one of the plurality of~~ a source network within the networks to the protocol and format of the user terminal.

10. (currently amended): The network system according to claim 9, wherein the packet exchange performs the conversion of the packet data using ~~MPLS (multi-protocol label switching protocol)~~ (MPLS) or IP within IP.

11. (currently amended): The network system according to claim 8, wherein the user terminal is a personal computer or a portable terminal, ~~having the function~~ capable of processing packet data.

12. (currently amended): A network system comprising:

an IP network through which an IP packet is transmitted;

an access gateway connected to the IP network;

a user terminal which is installed on a user side and is connected to the access gateway;

one or more servers which are connected to the IP network and function to record information about the user and ~~the a~~ plurality of service providers or online entrepreneurs, and information about services provided ~~from the plurality of~~ by the service providers or online entrepreneurs to the user, and, based on the ~~record~~ recorded information, to unitarily manage account information of the ~~service~~ services provided to the user;

a packet exchange, ~~which is~~ connected to the IP network, ~~converts~~ for converting received packet data to ~~the a~~ format and protocol of ~~the a~~ network of a service provider or an online entrepreneur as a send destination, and ~~sends~~ sending the converted packet data to the send destination; and

a plurality of border gateways which connect the packet exchange to ~~the a~~ plurality of networks of the service providers or online entrepreneurs.

13. (currently amended): The network system according to claim 12, wherein the user terminal is a personal computer or a portable terminal, ~~having the function~~ capable of processing packet data, and

the access gateway is a remote access server.

14. (original): The network system according to claim 13, wherein the portable terminal is a portable telephone having an i mode function.

15. (currently amended): The network system according to claim 12, wherein the user terminal and the packet exchange ~~each~~ are each a router.

16. (original): The network system according to claim 12, wherein the packet exchange is an exchange router.

17. (currently amended): The network system according to claim 12, 15 or 16, wherein the packet exchange ~~performs the conversion of~~ converts the received packet to the format and the protocol of the ~~network of the~~ send destination through ~~the encapsulation of~~ encapsulating the format of the original IP packet by MPLS (multi-protocol label switching protocol) (MPLS) or IP within IP.

18. (currently amended): The network system according to claim 17, wherein the original IP packet comprises an IP (internet protocol) header ~~+~~ and payload data, the packet data encapsulated by MPLS comprises an MPLS label for path designation~~+~~, an MPLS label for user ID~~+~~, an IP header ~~+~~ and payload data, and the packet data encapsulated by IP within IP comprises an IP header for encapsulation~~+~~, an IP header ~~+~~ and payload data.

19. (currently amended): A packet data transmission method wherein packet data transmission for ~~receive/send of~~ receiving/sending services between a user terminal and a plurality of service providers or online entrepreneurs is carried out using ~~VPN (a plurality of virtual private network)~~, (VPN) platforms corresponding to the service providers, said packet data transmission method comprising ~~the steps of~~:

recording, in one or more servers, information about one or more users, ~~who~~ that utilize the user terminal, and information about the ~~plurality of~~ service providers or online entrepreneurs;

upon ~~the receipt of~~ receiving a request from the user for a service, and only when information about the packet data from the user terminal matches access conditions recorded in the servers, converting the packet data from the user to ~~the a~~ a protocol and format of ~~the a~~ a network of a service provider or an online entrepreneur as a send destination by a packet exchange, and sending the converted packet data to ~~a network corresponding to the designated one of the plurality of service providers or online entrepreneurs~~ the send destination;

for packet data sent from the ~~plurality of~~ service providers or online entrepreneurs, converting the packet data to ~~the a~~ a protocol and format of ~~the a~~ a network on the user terminal side by the packet exchange, and sending the converted packet data to the user terminal; and

storing and managing account information about the services provided to the user and ~~executing~~ providing alternative account billing to the user by the servers.

AMENDMENT UNDER 37 C.F.R. § 1.111
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20. (currently amended): The packet data transmission method according to claim 19, wherein the conversion of packet data by the packet exchange is carried out using ~~MPLS~~ (multi-protocol label switching protocol) (MPLS) or IP within IP based on the VPN platform corresponding to the service provider receiving/sending the packet data.